

Date: Fri, 6 May 94 21:09:12 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #498  
To: Info-Hams

Info-Hams Digest                      Fri, 6 May 94                      Volume 94 : Issue 498

Today's Topics:

                    AEA LogWindows  
                    Amateur Radio and Civil Rights  
        Daily Summary of Solar Geophysical Activity for 05 May  
                    FOR SALE: Misc 220 Radios  
                    International Callsign  
        Licencing cost (was: Canadian Reciprocity)  
                    Need copies of tower laws  
        New license class but same old call sign!  
                    Spectrum Show 30 Apr  
        Weekly Solar Terrestrial Forecast & Review for 06 May

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 6 May 94 20:20:25 GMT  
From: agate!howland.reston.ans.net!gatech!news-feed-1.peachnet.edu!news.duke.edu!  
eff!news.kei.com!babbage.ece.uc.edu!mary.iaa.org!rtp.vnet.net!news.sprintlink.net!  
connected.com!connected.com!@  
Subject: AEA LogWindows  
To: info-hams@ucsd.edu

Have not received many comments or reviews since my posting a couple  
weeks ago on the new AEA LogWindows program. Am still interested in  
hearing how others like it.

I (FINALLY) got mine to work this morning. Have received excellent  
- but fruitless - hand holding from Tom at AEA. My problem was that

ICOM 751A on Port 1 and AEA PK232 on Port 2 were not compatible with the program. I kept getting "time out" messages. AEA theorized this to be an IRQ conflict with my modem in Port 3. After a number of gyratons, I merely swapped Port 1 and Port 2 and the auto-log feature works like a charm.

Mehtods to remember if you should happen to chance on the same problem.

--

-----  
Jeff Freedman            Tacoma, Washington            jfreedmn@hebron.connected.com  
K7JF                    You come here with a skull full of mush ...  
-----

-----  
Date: Fri, 6 May 94 01:23:08 -0500  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!noc.near.net!news.delphi.com!  
usenet@network.ucsd.edu  
Subject: Amateur Radio and Civil Rights  
To: info-hams@ucsd.edu

YEA!!!!!!YEE!!!!!!BRAVO!!!!!!@!.....de N6WR

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Date: Thu, 5 May 1994 21:37:07 MDT  
From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!nntp.cs.ubc.ca!alberta!ve6mgs!  
usenet@network.ucsd.edu  
Subject: Daily Summary of Solar Geophysical Activity for 05 May  
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

05 MAY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 05 MAY, 1994  
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NOTE: Electrons at greater than 2 MeV continued at high to very high levels today. The background x-ray flux was less than A1.0. Values less than

about a class B1.0 should be considered somewhat unreliable.

```
!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 125, 05/05/94
10.7 FLUX=073    90-AVG=088        SSN=015        BKI=4443 3444  BAI=024
BGND-XRAY=A1.0    FLU1=8.5E+04  FLU10=1.3E+04  PKI=5554 4444  PAI=032
  BOU-DEV=065,064,060,030,038,046,050,049  DEV-AVG=050 NT    SWF=00:000
  XRAY-MAX= A9.4   @ 1549UT    XRAY-MIN= A1.0   @ 2354UT    XRAY-AVG= A2.6
NEUTN-MAX= +001%  @ 2355UT    NEUTN-MIN= -003%  @ 2330UT    NEUTN-AVG= -0.1%
  PCA-MAX= +0.1DB @ 2355UT    PCA-MIN= -0.2DB @ 1920UT    PCA-AVG= +0.0DB
BOUTF-MAX=55356NT @ 2338UT    BOUTF-MIN=55297NT @ 1552UT    BOUTF-AVG=55322NT
GOES7-MAX=P:+000NT@ 0000UT    GOES7-MIN=N:+000NT@ 0000UT    G7-AVG=+078,+000,+000
GOES6-MAX=P:+133NT@ 1926UT    GOES6-MIN=N:-111NT@ 0354UT    G6-AVG=+097,+030,-045
  FLUXFCST=STD:072,072,072;SESC:072,072,072  BAI/PAI-FCST=020,015,010/025,020,020
  KFCST=3336 6323 3325 5223  27DAY-AP=040,045  27DAY-KP=5655 5334 6556 5444
  WARNINGS=*GSTRM;*AURMIDWCH
  ALERTS=
!!END-DATA!!
```

NOTE: The Effective Sunspot Number for 04 MAY 94 was 25.5.  
The Full Kp Indices for 04 MAY 94 are: 4o 5- 4- 3+ 4- 4o 3o 3o  
The 3-Hr Ap Indices for 04 MAY 94 are: 30 43 24 19 22 30 15 16  
Greater than 2 MeV Electron Fluence for 05 MAY is: 1.4E+09

#### SYNOPSIS OF ACTIVITY

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Solar activity was very low. No events were observed.  
Region 7714 (S14W05) is the only spotted region and is growing slowly.

Solar activity forecast: solar activity is expected to be very low.

The geomagnetic field ranged from unsettled to storm levels - minor storm at middle latitudes and major storm at high latitudes.

STD: Energetic electrons at greater than 2 MeV have remained at high to very high levels today at geosynchronous altitudes.

Geophysical activity forecast: the geomagnetic field is expected to be mostly active during the day with storm conditions possible at local nighttime. Activity levels should slowly diminish over the forecast period.

Event probabilities 06 may-08 may

Class M 01/01/01  
Class X 01/01/01  
Proton 01/01/01  
PCAF Green

Geomagnetic activity probabilities 06 may-08 may

A. Middle Latitudes

Active 30/35/15  
Minor Storm 15/15/05  
Major-Severe Storm 05/05/05

B. High Latitudes

Active 30/40/15  
Minor Storm 25/15/05  
Major-Severe Storm 10/05/05

HF propagation conditions continued below-normal over the high and polar latitudes. Very gradual improvements in propagation conditions are expected over the next 72 hours, although a return to near-normal conditions is not expected until next week.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 05/2400Z MAY

-----

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7714	S14W05	284	0010	BX0	04	005	BETA	
7711	S11W58	337					PLAGE	
7712	S11W46	325					PLAGE	
7713	N06W15	294					PLAGE	
7715	N09W81	360					PLAGE	
7716	N02W53	332					PLAGE	
7717	S07W39	318					PLAGE	

REGIONS DUE TO RETURN 06 MAY TO 08 MAY

NMBR LAT LO

NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 05 MAY, 1994

-----

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
NONE									

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 05 MAY, 1994

-----  
 BEGIN            MAX            END            LOCATION    TYPE    SIZE    DUR    II IV  
 NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 05/2400Z

-----  
 ISOLATED HOLES AND POLAR EXTENSIONS  
 EAST    SOUTH   WEST    NORTH   CAR   TYPE   POL   AREA   OBSN  
 78   S40E02 S47W29 S32W90 S32W90 323   EXT   NEG   023 10830A  
 80   N30W15 N30W26 N40W26 N40W26 296   ISO   POS   003 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

-----  
 Date    Begin   Max    End   Xray   Op Region   Locn       2695 MHz   8800 MHz   15.4 GHz  
 -----  
 NO EVENTS OBSERVED.

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

-----  
 C    M    X       S    1    2    3    4    Total    (%)  
 --   --   --       --   --   --   --   --   ---    -----  
 Uncorrelated: 0    0    0       0    0    0    0    0    000    ( 0.0)

Total Events: 000 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

-----  
 Date    Begin   Max    End   Xray   Op Region   Locn       Sweeps/Optical Observations  
 -----  
 NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II           = Type II Sweep Frequency Event  
III          = Type III Sweep  
IV           = Type IV Sweep  
V            = Type V Sweep  
Continuum   = Continuum Radio Event  
Loop         = Loop Prominence System,  
Spray        = Limb Spray,  
Surge        = Bright Limb Surge,  
EPL          = Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

-----  
Date: 6 May 94 16:24:00 GMT  
From: agate!darkstar.UCSC.EDU!news.hal.COM!olivea!charnel.ecst.csuchico.edu!  
yeshua.marcam.com!news.kei.com!eff!news.umbc.edu!europa.eng.gtefsd.com!  
howland.reston.ans.net!cs.utexas.edu!swrinde!  
Subject: FOR SALE: Misc 220 Radios  
To: info-hams@ucsd.edu

MI>Here's a list of stuff that Ken, WB6TOP is selling. Sorry but no  
MI>prices but I'd say that half of list would be a decent jump-off  
MI>point.

MI>1           Icom 6 meter all mode transceiver  
MI>2           NCR 12VDC 10 amp Power Supplies

MI>Will trade for IBM clone stuff; looking for RAM SIMMS...

Let your friend knwo that I am interested in the above items,  
and have the following to trade:

#### HARDWARE FOR SALE

~~~~~

FLOPPY DISKETTES (all are pre-formatted MS-DOS)

~~~~~

720K 3+" ----- 50 diskettes - \$20.00  
1.44M 3+" (720K punched out and formatted 1.44M) - \$20.00 for 50  
360K 5," ----- 50 diskettes - \$5.00

DTK XT - 640K RAM, two 360K floppies, Western Digital hard disk  
controller, 40 MEG hard disk, 98 key extended keyboard,  
Citizen Premiere 35 daisywheel wide carriage printer and  
printer cable - \$200.00 plus shipping

OTHER STUFF!

~~~~~

Genuine IBM PC/XT keyboard w/83 keys, plexi dust cover... \$35.00

Texas Instruments Appletalk/RS-232 port for microLaser... \$50.00

Texas Instruments new developer cartridge for microLaser.. \$95.00

Texas Instruments new OPC cartridge (drum)for microLaser..\$110.00

AST 4-port serial card - NEW, w/4 socketed 16550 UARTS... \$100.00

Practical Peripherals Microbuffer In-Line w/256K RAM.... \$100.00

RS232 Gender Changer Male/Male..... \$10.00

Kensington Universal Printer Stand..... \$10.00

2 Electriccord XP 6 outlet strip surge protectors (new)..ea \$10.00

Compaq portable floppy control/printer port - excellent... \$25.00

Chatsworth Data mark sense card reader w/serial cable.... \$150.00

Calltext 5000 text to speech converter & telephone communications board - currently sells for \$3200 ----sale!..... \$150.00

NS16450N UARTS ---- \$5.00 each

NS16550AFN UARTS -- \$15.00 each

4 - 256K-70ns 3-chip SIMMs - \$10.00 each or \$35.00 for all

4 - CY7C185-25PC (8Kx8) static RAM, 25 ns. - \$5.00 each

63 pcs - 4164 - 120 ns DRAMs - \$.50 each or \$30.00 for all

6 pcs - 41256 - 70 ns DRAMS - \$1.25 each or \$7.00 for all

2764 EPROMs - \$2.50 each

Magnatech 16mm recorder/reproducer - can be modified to 35mm.  
comes in large Anvil case on wheels.....\$1500.00

KLOSS Video projector & screen - 6+" foot diagonal screen,  
rebuilt projection tubes, will sell in Southern CA area  
only, since it is too large to ship by UPS!.....\$1150.00

Above prices do not include shipping. If interested, leave  
message here or call.

Darryl Linkow  
(818) 346-5278 9 am - 5 pm PDT

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~ OLX 2.2 ~ Darryl Linkow (818)346-5278 9 am - 5 pm PDT

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Date: Fri, 06 May 1994 02:49:22 GMT

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!lerc.nasa.gov!  
kira.cc.uakron.edu!malgudi.oar.net!witch!doghouse!jsalemi@network.ucsd.edu  
Subject: International Callsign  
To: info-hams@ucsd.edu

In article <CpC5tr.72s@cbnews1.cb.att.com>, anthony.j.gaeta  
(ajg@cbnews1.cb.att.com) writes:  
>I am so excited! I had my first international QSO with station  
>LU2LB in Argentina. How do I lookup this callsign so I can send  
>him a QSL card?  
>

The International Callbook is one source. The Buckmaster CD-ROM is  
another, if the April '94 edition has Argentina (the Oct. 93 one  
doesn't). He may also have a QSL manager. And the slow way is  
through the ARRL Outgoing QSL Bureau, if you're an ARRL member.

Congrats on the first DX!

73...joe

-----  
Joe Salemi, KR4CZ                      Internet:    jsalemi@doghouse.win.net  
Compuserve: 72631,23                  FidoNet:    1:109/136  
703-548-0928                          MCI Mail:   433-3961

-----  
Date: 7 May 94 01:35:28 GMT  
From: agate!library.ucla.edu!psgrain!nntp.cs.ubc.ca!alberta!atha!  
aupair.cs.athabascau.ca!rwa@ucbvax.berkeley.edu  
Subject: Licencing cost (was: Canadian Reciprocity)  
To: info-hams@ucsd.edu

jhanson@yar.cs.wisc.edu (Jason Hanson) writes:

>Russ Renaud <va3rr@amsat.org> wrote:

>>Our cousins to the south pay less than \$6.00 U.S. for a license that's  
>>good for 10 YEARS!!!!

Our cousins live in a sea of EMI and QRM. They're welcome to it.  
Or go live there; you're not a prisoner.

>Actually, we don't pay a thing for the license. The \$5.xx goes for testing



>fees. So, in theory, you can pay that once and have a license for life...

Our licenses are lifetime, too. It's the \*station\* license that costs \$26 per annum.

regards,

Ross ve6pdq

--

Ross Alexander VE6PDQ rwa@cs.athabascau.ca,  
(403) 675 6311 rwa@auwow.cs.athabascau.ca

-----  
Date: 6 May 94 20:38:03 GMT  
From: newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: Need copies of tower laws  
To: info-hams@ucsd.edu

In article <CpBAWG.Dnp@noose.ecn.purdue.edu>, miller@dynamo.ecn.purdue.edu (Tim Miller) writes:

:Need copies of antenna laws.

Tim: If you'll fax me a request on Monday at 312 793-3195 I'll send you a copy of the bill pending in the Illinois legislature. Florida and Washington have already passed theirs. These bills essentially say that "no municipality may regulate antennas in violation of PRB-1." It's a bit of a stretch to claim that this is a real limit on town zoning laws, but does require that the town take into account amateur's needs, whatever that means. 73, Jim O'Connell, W9WU  
ARRL Volunteer Counsel

-----  
Date: Fri, 06 May 1994 02:45:47 GMT  
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!usenet.ins.cwru.edu!lerc.nasa.gov!  
kira.cc.uakron.edu!malgudi.oar.net!witch!doghouse!jsalemi@network.ucsd.edu  
Subject: New license class but same old call sign!  
To: info-hams@ucsd.edu

In article <2qambqINN1fsi@ilx018.iil.intel.com>, Doug Braun  
(dbraun@ilx049.iil.intel.com) writes:

>

>I recently got my Advanced license in the mail (upgraded from General).  
>It took about 9 weeks, which is guess is better than average these days.

Congrats on the upgrade!

>

>BUT, I was disappointed to find that I didn't get a new call sign.

>It's still the old (and crummy) N10WU (say it three times). I'm certain

>that I checked the box for a new call, since I didn't like this one.

>Has the FCC changed their policy about issuing new call signs for upgrades?

>

No -- perhaps you didn't check the box after all, or perhaps the folks in Gettysburg missed it. No big deal; you can still fill out and send in another 610 requesting a new call sign. You'll get a 2x2 Advanced callsign back in the same 8-10 weeks.

73...joe

-----  
Joe Salemi, KR4CZ  
Compuserve: 72631,23  
703-548-0928

Internet: jsalemi@doghouse.win.net  
FidoNet: 1:109/136  
MCI Mail: 433-3961

-----  
Date: 6 May 94 20:30:00 GMT  
From: blkcat!org!fidonet!z1!n109!f239!William.Boan@uunet.uu.net  
Subject: Spectrum Show 30 Apr  
To: info-hams@ucsd.edu

BI>Newsgroups: rec.radio.amateur.misc

BI>From: bigsteve@dorsai.dorsai.org (Steve Coletti)

BI>Organization: Ripped Underwear Inc. Grunge on the inside!

BI>In article <2q0qee\$kb5@docman.doc.state.ne.us>, Gary McDuffie wrote:

BI>> The real question is: What's this trash doing in this news group?

BI>>

BI>> Before you go off the deep end, remember the definition of trash. It is

BI>> the same as weed. A rose is a weed if it's in the middle of the lawn.

It's

BI>> simply in the wrong place.

BI>That rose may be a weed if it's in the middle of the garden, but if you

BI>look at the entire garden from afar, you won't be able to tell it's out of  
BI>place.

BI>>

BI>> I have nothing against this posting except that it has nothing to do

with

BI>> this group. There are other places for it, especially when it is lengthy.

BI>A valid inquiry, and one that deserves an answer. Now don't take this BI>personally, but there are others who aren't as mature here. After having BI>been flamed in the past for off topic material, I am not waiting to go on BI>the defensive, I am taking the bull by the horns. It's not intended for BI>you, but for some others who haven't spoken up yet, or those that did, and BI>I didn't get their replys. (Our sysadmin decided to knock off a few BI>hackers so they letter bombed our spool and we lost a couple of megs of BI>mail, undoubtidly a few KB's were mine).

BI>My weekly comentaries on Spectrum will deal with all aspects of BI>communication. Because of the cross interest most Hams have, and the BI>posability of not everyone who is interested having access to all the BI>newsgroups, I will crosspost them here. If you have a good reader, you BI>will only see it once. But if you check r.r.a.misc first, it will only seem

BI>like it's in the wrong place whenever the commentary has nothing to do with

BI>amateur radio.

BI>I see no objections to my posting of Newslines each week? (Actually, I BI>don't post it directly to avoid duplication, Mark automatically crossposts BI>when I submit it to him for r.r.info). What if I tagged my comment on to BI>Newslines? I bet there would be no complaints then.

BI>I'm not allowed to add to, subtract from, or alter the Newslines text, and I

BI>made that rule. But if I did, and put a header or disclaimer that it BI>wasn't part of Newslines, there would still be people who wouldn't realize BI>it, simply because they don't read. The first line of each posting lists BI>Bill, WA6ITF, as the publisher, so why did I get a letter today asking if I

BI>was the publisher? If the header says send your comments to Bill, then BI>why do I get comments? Why did a Ham on another net who openly reprinted BI>"digipeater rabbit", GIVING FULL CREDIT TO THE AUTHOR, get replys like, BI>"this is the best thing you ever wrote"?

BI>The point is that if you see something YOU don't think should be here, read

BI>it again. If you still don't get it, just remember there may be others that

BI>do. So show some maturity, skip it and read something else. This is a NOT

BI>your personal newsgroup, it is world wide and is read by to people who BI>may find it interesting.

BI>Ranting and raving and, (if it's one of mine), flaming me isn't going to  
BI>make me stop, I already stated why and we're only talking about one  
message

BI>a week. If you think you can stop anyone that way, then you are nothing  
BI>more than a censor. While we do need them to protect the morals of kids  
BI>and morons, those that try to censor ideas are lowest form of scum on the  
BI>earth.

BI>As far as I'm concerned, the complaints have as much value as someone  
BI>saying he only has Icom in his shack and doesn't want to see anyone post  
BI>anything about Yeasu, Drake, Kenwood or whatever. They just make the  
BI>complainer look immature, close minded and stupid.

BI>SPECTRUM is heard on WWCR/5810 Khz at 0300 UTC-Sunday/10PM Eastern,  
BI>Saturdays.

BI&gt; - -

[illegible]

```
BI> < "Big Steve" Coletti >
```

BI> < Shortwave Listener, Broadcaster, Computer Consultant >

```
BI> < and all around nice guy >
```

BI> < Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >

```
BI> < UUCP: steve.cole@islenet.com ==== steveny@lopez.marquette.mi.us >
```

BI> < Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >

BI&gt; &lt; Voice: +1 212 995-2637 &gt;

```
BI> ~~~~~
```

BI&gt; - - -

BI> \* Origin: The Black Cat's Usenet <=> Fidonet Gateway (1:109/42)

Hi Steve, I was wondering if it was possible that I might get a tape, of the November 27, 1993, airing of SPECTRUM?

Thanks, William.

\*\*\*

\* SLMR 2.1a \* --T-A+G-L-I+N-E--+M-E-A+S-U-R+I-N-G+--G-A+U-G-E--

Fidonet: William Boan 1:109/239

Internet: William.Boan@f239.n109.z1.fidonet.org

Date: Thu, 5 May 1994 20:40:50 MDT

From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!nntp.cs.ubc.ca!alberta!ve6mgs!  
usenet@network.ucsd.edu

Subject: Weekly Solar Terrestrial Forecast & Review for 06 May

To: [info-hams@ucsd.edu](mailto:info-hams@ucsd.edu)

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---  
May 06 to May 15, 1994

Report Released by Solar Terrestrial Dispatch  
P.O. Box 357, Stirling, Alberta, Canada  
T0K 2E0  
Accessible BBS System: (403) 756-3008  
SKYCOM Announcement: (403) 756-2386

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SKYCOM Version 1.0b has been released. This is an enhanced version of the powerful High Frequency Ionospheric Signal Analyst software package.

Version 1.0b permits you to define a dictionary of locations or cities or "zones" of unlimited size. Select transmitter and receiver locations simply by typing the name of the sites or by displaying the defined sites on a VGA-quality map (with the sunrise/sunset terminator grayline, location of the overhead Sun, and locations of the critically influential auroral zones and more, all superimposed on the map) and selecting the desired locations with your mouse. Instantly determine distances between any two geographical locations. Define your own colors for SKYCOM's menus and prompts, and more. Numerous additional algorithmic enhancements have also been incorporated into this revision.

Produce VGA-quality global "snap-shots" of the state of the ionosphere (maps of maximum usable frequencies for variable distances, maps of critical F2-layer frequencies, maps of the height of maximum electron density, maps of solar zenith [or elevation] angles, maps of the magnetic field of the Earth, and much more). Ray trace signals through one of two realistic (IRI) models of the ionosphere. Handle up to 99 user-defined regions of sporadic-E. Generate broadcast coverage maps of signal quality, signal multipathing, ionospheric focusing/defocusing of rays, and more. Rigorously compute maximum usable frequencies between any two geographical points using actual ray-tracing results.

SKYCOM produces high-precision results and handles practically every type of geophysical disturbance that can affect radio communications, from solar flares to geomagnetic storms to devastating polar cap absorption to sporadic-E and more. SKYCOM is a serious and user-friendly software product for serious communicators.

For more information, call the recorded SKYCOM announcement (approx 3 minutes) listed above or send e-mail to: Oler@Ultrix.Uleth.CA. This is a software package no radio communicator or listener should be without.

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# SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE

|    | 10.7 cm | HF Propagation +/ - CON |    |    |    |     |      |    | SID   |    |    |    | AU.BKSR DX |    |    |    | Mag  | Aurora |    |    |  |
|----|---------|-------------------------|----|----|----|-----|------|----|-------|----|----|----|------------|----|----|----|------|--------|----|----|--|
|    | SolrFlx | LO                      | MI | HI | PO | SWF | %MUF | %  | ENH   | LO | MI | HI | LO         | MI | HI | %  | K Ap | LO     | MI | HI |  |
| -- | -----   | -----                   |    |    |    |     |      |    | ----- |    |    |    | -----      |    |    |    | ---- | -----  |    |    |  |
| 06 | 072     | G                       | F  | VP | VP | 05  | -35  | 65 | 05    | NA | NA | NA | 03         | 30 | 40 | 25 | 5 28 | NV     | MO | MO |  |
| 07 | 072     | G                       | F  | VP | VP | 05  | -30  | 65 | 05    | NA | NA | NA | 03         | 30 | 40 | 25 | 5 25 | NV     | MO | MO |  |
| 08 | 072     | G                       | F  | P  | P  | 05  | -25  | 65 | 05    | NA | NA | NA | 02         | 25 | 35 | 25 | 4 23 | NV     | LO | MO |  |
| 09 | 072     | G                       | F  | P  | P  | 05  | -25  | 65 | 05    | NA | NA | NA | 02         | 25 | 35 | 30 | 4 23 | NV     | LO | MO |  |
| 10 | 073     | G                       | G  | P  | P  | 05  | -20  | 65 | 05    | NA | NA | NA | 02         | 25 | 35 | 30 | 4 20 | NV     | LO | MO |  |
| 11 | 073     | G                       | G  | P  | P  | 05  | -20  | 65 | 05    | NA | NA | NA | 02         | 20 | 30 | 30 | 4 20 | NV     | LO | MO |  |
| 12 | 075     | G                       | G  | P  | P  | 05  | -20  | 65 | 05    | NA | NA | NA | 02         | 20 | 30 | 30 | 3 18 | NV     | LO | MO |  |
| 13 | 075     | G                       | G  | F  | F  | 05  | -15  | 65 | 05    | NA | NA | NA | 02         | 20 | 30 | 35 | 3 18 | NV     | LO | MO |  |
| 14 | 077     | G                       | G  | F  | F  | 05  | -15  | 65 | 05    | NA | NA | NA | 02         | 15 | 25 | 35 | 3 15 | NV     | NV | LO |  |
| 15 | 077     | G                       | G  | F  | F  | 05  | -15  | 65 | 05    | NA | NA | NA | 02         | 15 | 25 | 35 | 3 15 | NV     | NV | LO |  |

## PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (06 MAY - 15 MAY)

|                   |                              |     |     |     |     |     |     |     |     |     |  |            |
|-------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|------------|
| EXTREMELY SEVERE  |                              |     |     |     |     |     |     |     |     |     |  | HIGH       |
| VERY SEVERE STORM |                              |     |     |     |     |     |     |     |     |     |  | HIGH       |
| SEVERE STORM      |                              |     |     |     |     |     |     |     |     |     |  | MODERATE   |
| MAJOR STORM       |                              |     |     |     |     |     |     |     |     |     |  | LOW - MOD. |
| MINOR STORM       | **                           | *   |     |     |     |     |     |     |     |     |  | LOW        |
| VERY ACTIVE       | ***                          | *** | **  | *   | *   | *   |     |     |     |     |  | NONE       |
| ACTIVE            | ***                          | *** | *** | *** | *** | *** | *** | *** | **  | **  |  | NONE       |
| UNSETTLED         | ***                          | *** | *** | *** | *** | *** | *** | *** | *** | *** |  | NONE       |
| QUIET             | ***                          | *** | *** | *** | *** | *** | *** | *** | *** | *** |  | NONE       |
| VERY QUIET        | ***                          | *** | *** | *** | *** | *** | *** | *** | *** | *** |  | NONE       |
| Geomagnetic Field | Fri                          | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |  | Anomaly    |
| Conditions        | Given in 8-hour UT intervals |     |     |     |     |     |     |     |     |     |  | Intensity  |

CONFIDENCE LEVEL: 70%

## NOTES:

Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

## 60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

|     |  |              |      |                                                  |                                |      |  |       |
|-----|--|--------------|------|--------------------------------------------------|--------------------------------|------|--|-------|
| 124 |  |              |      |                                                  |                                | S    |  |       |
| 117 |  |              |      |                                                  |                                | S    |  |       |
| 110 |  |              |      |                                                  |                                | S    |  |       |
| 104 |  |              |      |                                                  |                                | S    |  |       |
| 98  |  |              |      |                                                  |                                | S    |  |       |
| 91  |  |              |      |                                                  |                                | S    |  |       |
| 84  |  |              |      |                                                  |                                | S    |  |       |
| 78  |  |              |      |                                                  |                                | S    |  |       |
| 72  |  |              |      | J                                                |                                | S    |  |       |
| 65  |  |              |      | J                                                |                                | S    |  |       |
| 58  |  |              |      | J                                                |                                | S    |  |       |
| 52  |  | J            |      | J                                                |                                | S    |  |       |
| 46  |  | J            |      | JJ                                               |                                | S    |  |       |
| 39  |  | MMJ          | M    |                                                  | JJ M MM M                      | S    |  | MM    |
| 32  |  | MMJMMM       | M    |                                                  | MJJ MMMM M                     | S    |  | MMM   |
| 26  |  | MMJMMM       | AM M | A                                                | MJJMMMMMMM                     | A AS |  | MMM   |
| 20  |  | MMJMMMAAM    | M    | A                                                | MJJMMMMMMMMAAA                 | AS   |  | MMMAA |
| 13  |  | MMJMMMAAMAMA | U    | AAAAU                                            | MJJMMMMMMMMAAAAASAA            |      |  | MMMAA |
| 6   |  | MMJMMMAAMAMA | U    | AAAAUUUUU                                        | UU MJJMMMMMMMMAAAAASAAUUUUUUUU |      |  | MMMAA |
| 0   |  | MMJMMMAAMAMA | U    | AAAAUUUUUQUUQMJJMMMMMMMMAAAAASAAUUUUUUUUQQQMMMAA |                                |      |  |       |

-----  
Chart Start Date: Day #066

# NOTES:

This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.

Q = Quiet, U = Unsettled, A = Active, M = Minor Storm, J = Major Storm, and S = Severe Storm.

## CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

|     |  |       |    |       |  |       |  |  |
|-----|--|-------|----|-------|--|-------|--|--|
| 094 |  |       |    |       |  |       |  |  |
| 093 |  | *     |    | *     |  |       |  |  |
| 092 |  | *     |    | **    |  |       |  |  |
| 091 |  | **    | *  | ***** |  |       |  |  |
| 090 |  | ***   | ** | ***** |  |       |  |  |
| 089 |  | ***   | ** | ***** |  |       |  |  |
| 088 |  | ***** |    | ***** |  |       |  |  |
| 087 |  | ***** |    | ***** |  | *     |  |  |
| 086 |  | ***** |    | ***** |  | **    |  |  |
| 085 |  | ***** |    | ***** |  | ***** |  |  |
| 084 |  | ***** |    | ***** |  | ***** |  |  |
| 083 |  | ***** |    | ***** |  | ***** |  |  |

```

082 | *****
081 | *****
080 | *****
079 | *****
078 | ***** *
077 | *****
076 | ***** *
075 | ***** *
074 | *****
073 | *****
072 | *****
-----

```

Chart Start: Day #066

# GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```

107 | -----
106 | *****
105 | *****
104 | *****
103 | *****
102 | *****
101 | *****
100 | *****
099 | *****
098 | *****
097 | *****
096 | *****
095 | *****
094 | *****
093 | *****
092 | *****
091 | *****
090 | *****
089 | *****
088 | *****
087 | *****
-----

```

Chart Start: Day #066

## NOTES:

The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun.



The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

## CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

[illegible]

Chart Start: Day #066

NOTES:

The graphical chart of sunspot numbers is created from the daily sunspot number counts as reported by the SESC.

## HF RADIO SIGNAL PROPAGATION PREDICTIONS (06 MAY - 15 MAY)

## High Latitude Paths

|                     |       | EXTREMELY GOOD | VERY GOOD | GOOD | FAIR | POOR | VERY POOR |
|---------------------|-------|----------------|-----------|------|------|------|-----------|
| CONFIDENCE<br>LEVEL | ----- |                |           |      |      |      |           |
|                     | 65%   |                |           |      |      |      |           |
|                     |       |                |           |      |      |      |           |
|                     |       |                |           |      |      |      |           |
|                     |       |                |           |      |      |      |           |

|                |                                 |      |      |      |      |      |      |      |      |      |      |
|----------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|
| EXTREMELY POOR |                                 |      |      |      |      |      |      |      |      |      |      |
| -----          | ----                            | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| PROPAGATION    | Fri                             | Sat  | Sun  | Mon  | Tue  | Wed  | Thu  | Fri  | Sat  | Sun  |      |
| QUALITY        | Given in 8 Local-Hour Intervals |      |      |      |      |      |      |      |      |      |      |

## Middle Latitude Paths

|       |                     | CONFIDENCE LEVEL                |       |       |       |       |       |       |       |       |       |       |       |
|-------|---------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|       | EXTREMELY GOOD      |                                 |       |       |       |       |       |       |       |       |       |       |       |
|       | VERY GOOD           |                                 |       |       |       |       |       |       |       |       |       |       |       |
|       | GOOD                | *                               | *     | **    | **    | **    | **    | **    | **    | **    | **    | ***   | ***   |
|       | FAIR                | * *                             | * *   | *     | *     | *     | *     | *     | *     | *     | *     |       |       |
| ----- | POOR                |                                 |       |       |       |       |       |       |       |       |       |       |       |
| 70%   | VERY POOR           |                                 |       |       |       |       |       |       |       |       |       |       |       |
|       | EXTREMELY POOR      |                                 |       |       |       |       |       |       |       |       |       |       |       |
|       |                     | -----                           | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
|       | PROPAGATION QUALITY | Fri                             | Sat   | Sun   | Mon   | Tue   | Wed   | Thu   | Fri   | Sat   | Sun   |       |       |
|       |                     | Given in 8 Local-Hour Intervals |       |       |       |       |       |       |       |       |       |       |       |

## Low Latitude Paths

|                                     |                     |                                 |       |       |       |       |       |       |       |       |       |       |
|-------------------------------------|---------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CONFIDENCE<br>LEVEL<br>-----<br>70% | EXTREMELY GOOD      |                                 |       |       |       |       |       |       |       |       |       |       |
|                                     | VERY GOOD           |                                 |       |       |       |       |       |       |       |       |       |       |
|                                     | GOOD                | **                              | **    | ***   | ***   | ***   | ***   | ***   | ***   | ***   | ***   | ***   |
|                                     | FAIR                | *                               | *     |       |       |       |       |       |       |       |       |       |
|                                     | POOR                |                                 |       |       |       |       |       |       |       |       |       |       |
|                                     | VERY POOR           |                                 |       |       |       |       |       |       |       |       |       |       |
|                                     | EXTREMELY POOR      |                                 |       |       |       |       |       |       |       |       |       |       |
|                                     | -----               | -----                           | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
|                                     | PROPAGATION QUALITY | Fri                             | Sat   | Sun   | Mon   | Tue   | Wed   | Thu   | Fri   | Sat   | Sun   |       |
|                                     |                     | Given in 8 Local-Hour Intervals |       |       |       |       |       |       |       |       |       |       |

NOTES:

| NORTHERN HEMISPHERE |                |         |  | SOUTHERN HEMISPHERE |                |         |  |
|---------------------|----------------|---------|--|---------------------|----------------|---------|--|
| High latitudes      | $\geq 55$      | deg. N. |  | High latitudes      | $\geq 55$      | deg. S. |  |
| Middle latitudes    | $\geq 40 < 55$ | deg. N. |  | Middle latitudes    | $\geq 30 < 55$ | deg. S. |  |
| Low latitudes       | $< 40$         | deg. N. |  | Low latitudes       | $< 30$         | deg. S. |  |

## POTENTIAL VHF DX PROPAGATION PREDICTIONS (06 MAY - 15 MAY)

INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

## HIGH LATITUDES

[illegible]



[illegible]

NOTES:

These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

## AURORAL ACTIVITY PREDICTIONS (06 MAY - 15 MAY)

## High Latitude Locations

|                                         |                |                                     |     |     |     |     |     |     |     |     |     |     |
|-----------------------------------------|----------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| CONFIDENCE<br>LEVEL<br><br>-----<br>70% | EXTREMELY HIGH |                                     |     |     |     |     |     |     |     |     |     |     |
|                                         | VERY HIGH      |                                     |     |     |     |     |     |     |     |     |     |     |
|                                         | HIGH           |                                     |     |     |     |     |     |     |     |     |     |     |
|                                         | MODERATE       | ***                                 | *** | *** | *** | *** | *** | *** | *** | *** | *   | *   |
|                                         | LOW            | ***                                 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** |
|                                         | NOT VISIBLE    | ***                                 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** |
|                                         | -----          | ---                                 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|                                         | AURORAL        | Fri                                 | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |     |
|                                         | INTENSITY      | Eve.Twilight/Midnight/Morn.Twilight |     |     |     |     |     |     |     |     |     |     |

## Middle Latitude Locations

[illegible]

|           |                                     |     |     |     |     |     |     |     |     |     |
|-----------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| -----     | ---                                 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AURORAL   | Fri                                 | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |     |     |     |     |     |     |     |     |     |
| -----     |                                     |     |     |     |     |     |     |     |     |     |

#### Low Latitude Locations

|                                     |                |                                     |     |     |     |     |     |     |     |     |     |     |
|-------------------------------------|----------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| CONFIDENCE<br>LEVEL<br>-----<br>75% | EXTREMELY HIGH |                                     |     |     |     |     |     |     |     |     |     |     |
|                                     | VERY HIGH      |                                     |     |     |     |     |     |     |     |     |     |     |
|                                     | HIGH           |                                     |     |     |     |     |     |     |     |     |     |     |
|                                     | MODERATE       |                                     |     |     |     |     |     |     |     |     |     |     |
|                                     | LOW            |                                     |     |     |     |     |     |     |     |     |     |     |
|                                     | NOT VISIBLE    | ***                                 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** |
|                                     | -----          | ---                                 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|                                     | AURORAL        | Fri                                 | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun |     |
|                                     | INTENSITY      | Eve.Twilight/Midnight/Morn.Twilight |     |     |     |     |     |     |     |     |     |     |
|                                     | -----          |                                     |     |     |     |     |     |     |     |     |     |     |

#### NOTE:

Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "C0ler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "C0ler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

\*\* End of Report \*\*

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End of Info-Hams Digest V94 #498

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